

We Claim:

1. A device for filtering data, wherein the data is formatted in a packet having discrete segments, the device comprising:
 - a mapping module that contains control logic for performing steps comprising:
 - (a) receiving the identification of at least two clusters of the discrete segments of data; and
 - (b) selecting at least two of a plurality of fixed length filters to filter the at least two clusters.
2. The device of claim 1, wherein the plurality of fixed length filters have a common length.
3. The device of claim 2, wherein each of the plurality of fixed length filters is 2 bytes.
4. The device of claim 1, wherein the plurality of fixed length filters is configured so that each of the plurality of fixed length filters has an offset value corresponding to one of the discrete segments of the packet.
5. The device of claim 4, wherein at least one of the plurality of fixed length filters has an offset value of 0.
6. The device of claim 1, wherein a first one of the at least two clusters of data is formatted in accordance with a first protocol and a second one of the at least two clusters of data is formatted in accordance with a second protocol different than the first protocol.
7. The device of claim 1, further including a filter module comprising the plurality of fixed length filters.
8. The device of claim 7, wherein the filter module contains control logic for performing the steps comprising:
 - receiving the at least two clusters of the discrete segments of data; and

filtering the at least two clusters of the discrete segments of data with the at least two of a plurality of fixed length filters.

9. The device of claim 1, wherein (a) comprises:

receiving an identification of a protocol of the data and a value.

10. The device of claim 1, wherein the protocol comprises DVB-T and the value comprises an IP address.

11. The device of claim 9, wherein the mapping module contains further control logic for performing the step of:

mapping the identification of the protocol of the data and the value to the at least two clusters of the discrete segments of data.

12. A method of generating a map for use by a filter module to filter clusters of data found in a packet of data, the method comprising the steps of:

(a) receiving the identification of at least two clusters of the discrete segments of data;

and

(b) selecting at least two of a plurality of fixed length filters to filter the at least two clusters.

13. The method of claim 12, further comprising the step of:

(c) generating a filter mask that identifies segments of the at least two of a plurality of fixed length filters.

14. The method of claim 13, further comprising the step of:

(d) providing filter values.

15. The method of claim 13, further comprising the step of:

(d) generate at least one rules for combining data filtered by the at least two of a plurality of fixed length filters.

16. The method of claim 12, further comprising the step of:

(c) selecting offset values for the at least two of the plurality of fixed length filters.

17. The method of claim 12, wherein a first one of the at least two clusters of data is formatted in accordance with a first protocol and a second one of the at least two clusters of data is formatted in accordance with a second protocol different than the first protocol.

18. A computer-readable medium containing computer-executable instructions for causing a mapping module to generate a map for use by a filter module to filter clusters of data found in a packet of data, the computer-executable instructions cause the mapping module to perform the steps comprising:

(a) receiving the identification of at least two clusters of the discrete segments of data;

and

(b) selecting at least two of a plurality of fixed length filters to filter the at least two clusters.

19. The computer-readable medium of claim 18, further including computer-executable instructions for causing the mapping module to perform the step of:

(c) generating a filter mask that identifies segments of the at least two of a plurality of fixed length filters.

20. The computer-readable medium of claim 19, further including computer-executable instructions for causing the mapping module to perform the step of:

(d) providing filter values.

21. The computer-readable of claim 19, further including computer-executable instructions for causing the mapping module to perform the step of:

(d) generate at least one rules for combining data filtered by the at least two of a plurality of fixed length filters.

22. The computer-readable of claim 18, further including computer-executable instructions for causing the mapping module to perform the step of:

(c) selecting offset values for the at least two of the plurality of fixed length filters.

188040v1